

**REMARKS**

***Status of the Claims***

Claims 1-19 are canceled, and claims 20-23 are added.

Support for claim 20 is found, for instance, in the specification at page 16, lines 18-28, pages 24-38 and in original claim 14.

Support for claims 20 and 21 is found, for instance, in the specification at page 16, lines 20-25.

Support for claim 22 is found, for instance, in Description 1 on pages 18-20 of the specification.

No new matter has been entered.

**1. Objection to the Specification**

On page 2 of the Office Action, the Examiner objects to the specification because it allegedly does not contain sequence identifiers. Applicants respectfully traverse.

Applicants direct the Examiner's attention to the amendment filed on January 31, 2005, in which Applicants amended the specification to recite all necessary SEQ ID NOs., and therefore respectfully request reconsideration and withdrawal of this objection.

**2. Claim Rejections under 35 USC Section 112 -- Written Description**

On page 3 of the Office Action, the Examiner rejects claim 17 as allegedly failing to comply with the written description requirement.

Although Applicants disagree with the rejection and the Examiner's rationale for imposing it, Applicants have canceled claim 17, and added new claims 20-23. Applicants point out that new claims 20-23 recite language that closely tracks the disclosure and language of the specification; and are supported as indicated above in the status of the claims section.

Accordingly, the written description rejection is overcome.

### **3. Claim Rejections under 35 USC Section 112 -- Enablement**

On pages 4-5 of the Office Action, the Examiner rejects claim 17 as allegedly failing to comply with the enablement requirement. Applicants respectfully traverse.

First, Applicants point out that the new claim 20 recites that a protein comprising all of the amino acid sequences set forth in SEQ ID NOs 1-5 is administered to the patient in the instantly claimed methods for preventing severe vascular thrombosis.

Next, Applicants recognize that the specification discloses the results of injecting rats with the protein of the invention (Lopap) on pages 34-38, and that, after injection, these rats develop clots in small vessels as well as hemorrhages. But Applicants point out that these phenomena relate to the action of Lopap in generating thrombin, which converts (and depletes) fibrinogen into blood clots (fibrin microthrombs), and the depletion of fibrinogen causes hemorrhages.

Here, Applicants emphasize that, one hour after injection, the rats have no detectable fibrinogen in their blood and that the fibrinogen-depleted blood is demonstrated to be incapable of clot formation. Accordingly, the specification teaches a person of skill in the art how to practice the instantly claimed method of administering the protein of the invention so as to prevent vascular thrombosis without undue experimentation. Accordingly, Applicants respectfully submit that the enablement requirement is met, and respectfully request reconsideration and withdrawal of this rejection access.

### **4. Conclusion**

Applicants respectfully request immediate and early allowance of all the claims, which are drawn to subject matter which meets all statutory patentability requirements.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of attached hereto.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell, Registration No. 36,623 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

- ☒ Attached is a Petition for Extension of Time.
- ☒ Attached hereto is the fee transmittal listing the required fees.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By   
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